

# Summary of Research



**Montana Fish,  
Wildlife & Parks**

## Statewide Estimates of Resident and Nonresident Hunter & Angler Expenditures in Montana (2014)

HD Unit Research Summary No. 39

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**Abstract:** *Montana Fish, Wildlife & Parks (FWP) recently conducted postcard surveys of resident and nonresident hunting and fishing license holders in an effort to update baseline economic information regarding average hunter/angler per day expenditures in Montana. The results of these surveys were used in combination with hunter use estimates (e.g., hunter days) provided by FWP's Hunter Harvest Survey and angler use estimates (e.g., angler days) from FWP's Angler Pressure Use Survey to produce estimates of total hunter and total angler expenditures in Montana. From this effort, it was estimated that hunters and anglers in Montana spend a little over 1.2 billion dollars annually in the state (see Table 1 on the reverse side of this research summary for more detailed statewide results).*

## BACKGROUND INFORMATION

Hunting and fishing is big business in Montana. Because of the economic stakes, Montana Fish, Wildlife & Parks (FWP) regularly provides estimates of hunter and angler expenditures across the state. This information is used by FWP to help address economic impacts associated with management actions, mitigation efforts, and other activities. At the same time, this information is often requested by counties, cities, chambers of commerce and others across the state who are interested in better understanding how hunting and fishing directly and indirectly support Montana's businesses. Last but not least, this type of information is used by state policymakers to examine the impacts of policy changes on state and local economies, businesses, and Montana citizens in general.

Three main pieces of information are used to estimate hunter and angler expenditures in Montana:

1. ***Hunter use estimates (e.g., hunter days) which are provided annually and/or biennially, depending on the species, from FWP's Hunter Harvest Survey. This information is collected at the hunting district level.***
2. ***Angler use estimates (e.g., angler days) which are provided biennially from FWP's Angler Pressure Use Survey. This information is collected for most all of Montana's lakes, rivers, and streams.***
3. ***Average per day hunting and fishing expenditure data which is derived from economic surveys of hunters and anglers.***

In 2014, FWP conducted surveys of resident and nonresident hunting and fishing license holders in an effort to update the agency's baseline economic information regarding average per day hunter/angler expenditures in

Montana. Postcard surveys of deer, elk, antelope, moose, bighorn sheep, mountain goat, upland game bird (pheasants, sharp-tailed grouse, Hungarian partridge), and waterfowl hunters were conducted as part of this effort. In addition to surveying hunters, postcard surveys of river/stream and lake/reservoir anglers were also conducted. Randomly selected survey participants for each postcard survey were asked how many days they hunted/fished on their most recent Montana hunting/fishing trip and how much they spent on this trip in the following areas:

- Transportation – gas, car rental, airfare, and any other transportation costs.
- Food, beverages and lodging.
- Equipment purchased just for the trip, access and/or guide fees, and all other expenses – NOT including the cost of their license and any durable goods (e.g., rifle/shotgun, fishing rod/reel, boots, pack, waders, boat, truck, etc.).

The results of these surveys were used in combination with hunter and angler use estimates to produce a valuation of total hunter and total angler expenditures in Montana (see Table 1 on the reverse side of this research summary for detailed statewide results).



**Table 1.** Statewide estimates of resident and nonresident hunter & angler expenditures in Montana (2014).

	Hunter/Angler Days <sup>1</sup>			Average Per Day Expenditures		Estimated Total Expenditures (in millions)		
	Residents	Nonresidents	Total	Residents	Nonresidents	Residents	Nonresidents	Total
Deer Hunters	972808	164760	1137568	\$71.86	\$479.41	\$69.9	\$79.0	\$148.9
Elk Hunters	801418	119079	920497	\$86.25	\$577.08	\$69.1	\$68.7	\$137.8
Antelope Hunters	47551	5444	52995	\$103.30	\$661.04	\$4.9	\$3.6	\$8.5
Moose Hunters	4010	69	4079	\$157.16	\$454.86	\$0.6	\$0.03	\$0.7
Bighorn Sheep Hunters	1935	408	2343	\$140.70	\$979.88	\$0.3	\$0.4	\$0.7
Mountain Goat Hunters	1579	131	1710	\$229.07	\$1,188.20	\$0.4	\$0.2	\$0.5
Pheasant Hunters	74373	25773	100146	\$84.11	\$362.52	\$6.3	\$9.3	\$15.6
Sharp-Tailed Grouse Hunters	38316	18680	56996	\$84.11	\$362.52	\$3.2	\$6.8	\$10.0
Hungarian Partridge Hunters	32265	13038	45303	\$84.11	\$362.52	\$2.7	\$4.7	\$7.4
Waterfowl Hunters	66187	28365	94552	\$69.52	\$465.67	\$4.6	\$13.2	\$17.8
River/Stream Anglers	1290924	953694	2244618	\$83.40	\$646.23	\$107.7	\$616.3	\$724.0
Lake/Reservoir Anglers	1007018	252672	1259690	\$87.35	\$379.33	\$88.0	\$95.8	\$183.8

1 Estimates of hunters days for deer, elk antelope, moose, bighorn sheep, and mountain goat hunting were provided from FWP's 2013 Hunter Harvest Survey. Estimates of hunter days for pheasant, sharp-tailed grouse, and Hungarian partridge hunting were provided from FWP's 2012 Hunter Harvest Survey. Estimates of hunters days for waterfowl hunting were provided from the US Fish & Wildlife Service 2013 Waterfowl Harvest Inventory Program (HIP). Estimates of angler days for river/stream and lake/reservoir fishing were provided from FWP's 2013 Angler Pressure Use Survey.

**Fishing Total (in millions)..... \$907.8**

**Hunting Total (in millions)..... \$347.9** The hunting total is biased upwards to some unknown degree because it sums species-specific expenditures whereas a hunter could have hunted multiple species on any given day (e.g., a single day spent hunting elk and deer would count as both an elk hunter day and a deer hunter day in FWP's Hunter Harvest Survey). This upward bias concern is most problematic for deer/elk and upland game bird (pheasants, sharp-tailed grouse, and Hungarian partridge) hunting.

## ABOUT THE AUTHORS

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